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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/740,600	12/19/2000	Lok Yan Leung	AUS920000864US1	3781

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Law Office of Joseph R. Burwell
P.O. Box 28022
Austin, TX 78755-8022

EXAMINER

VAUGHAN, MICHAEL R

ART UNIT	PAPER NUMBER
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2131

DATE MAILED: 05/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/740,600

Applicant(s)

LEUNG ET AL.

Examiner

Michael R Vaughan

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☒ Claim(s) 10,23 and 35 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-47 have been examined and are pending.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it exceeds the length limitation. Correction is required. See MPEP § 608.01(b).

The use of the trademark JAVA has been noted in this application. It should be capitalized wherever it appears (including claims) and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Drawings

Formal drawings are required in response to the instant Office action.

Figure 3 is objected to because it does not contain any of the reference labels that are described in the specification on page 13.

Claim Objections

Claims 10, 23, 35 are objected to because of the following informalities: they contain the trademark "JAVA" but the trademark is not capitalized. Appropriate correction is required.

Claim Rejections - 35 USC ' 112, second paragraph

Claims 4-5 and 38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claims 4-5, claim 4 is rendered indefinite because of it is unclear how the first software module is "called" without first being authenticated. The word call is very broad and can mean a number of things dealing in communications. Thus how could authentication proceed if the second software module was never called? If applicant intends the "call" to mean instantiating a particular method of software, there needs to be additional language to clarify this. Because the word call can also generically mean one part contacts another, the claim is indefinite.

Clarification and/or correction are required.

Claim 38 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 38 recites the limitation "a second security tool" in line 1 but there is no previous reference to a first security tool. Also, Claim 38 recites the limitation "the first security tool" in line 7 but there is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC ' 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 8-9, 11-18, 21, 22, 24-30, 33, 34, and 36-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Davis (USP 5,568,552).

As per claim 1, Davis teaches:

a first security tool associated with the first software module (col. 8, lines 19-20) ;

a second security tool communicatively coupled to the first software module, associated with the second Software module (col. 7, lines 66-67);

the first software module instantiating a first authenticating procedures on the second software module and using the second security tool (figure 7A, element 205); and

the second software module instantiating a second authenticating procedures on the first software module using the first security tools (figure 7A, element 215).

As per claim 14, Davis teaches:

authenticating the second software module from the first software module using a second security tool associated with the second software module (figure 7A, element 205);

and authenticating the first software module from the second software module using a first security tool associated with the first software module (figure 7A, element 215).

As per claim 26, Davis teaches:

instructions for authenticating the second software module from the first software module using a second security, tool associated with the second software module (figure 7A, element 205);

and instructions for authenticating the first software module from the second software module using a first security tool associated with the first software module (figure 7A, element 215).

As per claim 38, Davis teaches:

a plurality of digital key tools associated with the first software module and relating to the second software module (col. 7, lines 37-55);

a second security tool, communicatively coupled to the first software module, associated with the second software module for authenticating the first software module(col. 7, lines 66-67);

the first software module authenticating the second software module using the plurality of key tools (figures 7A and 7B);

and the second software module authenticating procedures on the first software module using the first security tools (figures 7A and 7B).

As per claim 43, Davis teaches:

the first software module authenticating the second software module using a plurality of digital key tools associated with the first software module and relating to the second software module (col. 8, lines 10-30);

the second software module authenticating the first software module using one or more security tools, the security tools associated with the second software module and relating to authenticating the first software module (col. 8, lines 30-35);

As per claims 2, 15, and 27 Davis teaches the first authenticating procedures include verifying a digital signature of the second software module (col. 7, line 48).

As per claims 3, 16, and 28 Davis teaches the first authenticating procedures include authenticating with a digital certificate (col. 8, line 24).

As per claim 4, Davis teaches the first software module calls the second software module, and the first authenticating procedures are implemented prior to the first software module calling the second software module (col. 8, lines 12-18).

As per claim 5, Davis teaches if the first authenticating procedures fail, the first software module does not call the second software module (figure 7A, element 255).

As per claims 8, 21, and 33 Davis teaches either the first software module or the second software module is dynamically loaded from another computing system (col. 8, line 60—col. 9, line 6).

As per claims 9, 22, and 34 Davis teaches the either first software module or the second software module is implemented in an operating system independent manner (col. 7, lines 5-10).

As per claims 11, 24, and 36 Davis teaches the first security tool comprising a digital signature of the first software module (col. 7, line 48).

As per claims 12, 25, and 37 Davis teaches the first security tool comprising a digital certificate relating to the second software module (col. 8, line 24).

As per claim 13, Davis teaches the first security tool comprising a public key relating to the second software module (col. 7, line 48).

As per claims 17 and 29 Davis teaches selectively calling the second software module based upon the step of authenticating the second software module (col. 8, lines 12-18).

As per claims 18 and 30 Davis teaches calling the second software module from the first software module (col. 8, lines 12-18); returning a successful result from the second software module upon authenticating the first software module (figure 7B, element 295); and returning an unsuccessful result from the second software module upon a failure to authenticate the first software module (figure 7A, element 255).

As per claim 39, Davis teaches the plurality of key tools comprising a plurality of digital certificates, one of the plurality of digital certificates allowing authentication of the second software module (col. 7, lines 45-55).

As per claims 40 and 45 Davis teaches the plurality of digital certificates are obfuscated (col. 7, lines 54-55).

As per claims 41 and 46 Davis teaches the plurality of digital certificates is accessed in a pattern known only to the first software module (col. 7, lines 47-49).

As per claims 42 and 47 Davis teaches the pattern is based upon a random number (col. 3, line 18).

As per claim 44, Davis teaches, the plurality of key tools comprising a plurality of digital certificates, one of the plurality of digital certificates allowing authentication of the second software module (col. 8, line 24).

Claim Rejections - 35 USC ' 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 7, 10, 19, 20, 23, 31, 32, 35, are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis in view of Liu et al, hereinafter Liu (USP 6,721,888).

As per claims 6, 10, 19, 23, 31, and 35 Davis is silent in expressly disclosing that the second software module contains a constructor by which the second software module is implemented and the second authenticating procedures are implemented in the constructor. Davis teaches a mutual authentication procedure at a higher level. Liu, on the other hand teaches a mutual authentication procedure whereby he explicitly discloses disclosing that the second software module contains a constructor by which the second software module is implemented and the second authenticating procedures are implemented in the constructor (col. 17, lines 17-34). Liu's method of authentication is centered on the JAVA program language and uses the objects of JAVA to implement a secure mutual authentication. Using the teachings from Liu's system, it would enable the system of Davis to operate on JAVA compliant systems.

In view of this, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the teaching of Liu within the system of Davis because the system could then authenticate entities by using the platform independent language of JAVA. One skilled in the art would have been motivated to generate the claimed invention with a reasonable expectation of success.

As per claims 7, 20, 32 Davis teaches the authenticating procedures fail and the communication is halted and an unsuccessful result is returned. Therefore, by

implements the teachings of Liu within the system of Davis as motivated in the rejection of claim 6, it is further obvious that the constructor would also fail and return an unsuccessful result in the event that the authentication procedure fails.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael R Vaughan whose telephone number is 703-305-0354. The examiner can normally be reached on M-F 7:30-4:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 703-305-9648. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MV
Michael R Vaughan

Examiner

Art Unit 2131


EMMANUEL L. MOISE
PRIMARY EXAMINER
A/1/21/36